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[Continued on next page]

(54) Title: METHOD FOR MASS PRODUCTION OF HUMAN FOLLICLE STIMULATING HORMONE

Wild type DNA sequence	ATG	AAG	ACA	CTC	CAG	TTT	TTC	TTC	CTT	TTC	TGT	TGC	TGG	AAA	GCA
Amplified DNA sequence	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Amino acid sequence	Met	Lys	Thr	Leu	Gln	Phe	Phe	Phe	Leu	Phe	Cys	Cys	Trp	Lys	Ala
	ATC	TGC	TGC	AAT	AGC	TGT	GAG	CTG	ACC	AAC	ATC	ACC	ATT	GCA	ATA
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ile	Cys	Cys	Asn	Ser	Cys	Glu	Leu	Thr	Asn	Ile	Thr	Ile	Ala	Ile
	GAG	AAA	GAA	GAA	TGT	CGT	TTC	TGC	ATA	AGC	ATC	AAC	ACC	ACT	TGG
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	Glu	Lys	Glu	Glu	Cys	Arg	Phe	Cys	Ile	Ser	Ile	Asn	Thr	Thr	Trp
	TGT	GCT	GCC	TAC	TGC	TAC	ACC	AGG	GAT	CTG	GTG	TAT	AAG	GAC	CCA
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Cys	Ala	Gly	Tyr	Cys	Tyr	Thr	Arg	Asp	Leu	Val	Tyr	Lys	Asp	Pro
FSH $\beta$ subunit	GCC	AGG	CCC	AAA	ATC	CAG	AAA	ACA	TGT	ACC	TTC	AAG	GAA	CTG	GTA
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ala	Arg	Pro	Lys	Ile	Gln	Lys	Thr	Cys	Thr	Phe	Lys	Glu	Leu	Val
	TAT	GAA	ACA	GTG	AGA	GTG	CCC	GGC	TGT	GCT	CAC	CAT	GCA	GAT	TCC
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Tyr	Glu	Thr	Val	Arg	Val	Pro	Gly	Cys	Ala	His	His	Ala	Asp	Ser
	TTG	TAT	ACA	TAC	CCA	GTG	GCC	ACC	CAG	GTG	CAC	TGT	GGC	AAG	TGT
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Leu	Tyr	Thr	Tyr	Pro	Val	Ala	Thr	Gln	Val	His	Cys	Gly	Lys	Cys
	GAC	AGC	GAC	AGC	ACT	GAT	TGT	ACT	GTG	CGA	GGC	CTG	GGG	CCC	AGC
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	Asp	Ser	Asp	Ser	Thr	Asp	Cys	Thr	Val	Arg	Gly	Leu	Gly	Pro	Ser
	TAC	TGC	TCC	TTT	GGT	GAA	ATG	AAA	GAA	TAA	---	---	---	---	---
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	Tyr	Cys	Ser	Phe	Gly	Glu	Met	Lys	Glu	termination	---	---	---	---	---

(57) Abstract: The present invention relates to a method for mass-production of human follicle stimulating hormone, more precisely, to an expression vector containing human follicle stimulating hormone gene, a transformant transfected with the expression vector and a method for mass-production of human follicle stimulating hormone by using the same. Human follicle stimulating hormone can be produced largely by using an expression vector and a transformant of the present invention. Therefore the expression vector and the transformant of the present invention can be effectively used for the treatment of infertility.



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